

MARQUETTE UNIVERSITY SCHOOL OF MEDICINE

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DEPARTMENT OF MICROBIOLOGY
AND IMMUNOLOGY

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Dr. Joshua Lederberg
Department of Genetics
University of Wisconsin
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Madison 6, Wisconsin

Dear Lederberg:

I am sorry not to have been more prompt in answering your queries of October 2 and 5. We are currently swamped with teaching duties.

By way of general statement regarding the E. coli strains that you received from us: The problem carried out by Miss Neumann involved isolation of about 5 EMB-typical coli strains from all feces specimens obtained from cases of infant gastroenteritis occurring in the local Children's Hospital. From these isolates O and B antigens were prepared and checked against specific antisera to determine the occurrence and frequency of certain serotypes which have been incriminated in infant diarrhea in other countries. She did not prepare antisera against these isolates, so we are unable to help out Dr. Skaar in this regard.

Although the specimens were all from diarrhea cases, I think that considerable heterogeneity of coli strains should be expected, especially in those cases where the diarrhea was not of coli etiology. One other point in regard to specimens: many of the patients had received aureomycin before some of the specimens were obtained.

The rundown on the specimen numbers that you listed is as follows:

(119a) (4-2-51) acute diarrhea; also from same patient: 112 a thru f (3-29-51)
→ 115 b thru f (3-30-51)
124 a and c (4-3-51)
129d (4-4-51) acute gastroenteritis; also from same patient:
131 a and b (4-5-51)
170c (5-10-51) diarrhea following admission; also from same patient:
161 a thru g (5-8-51)
169 c,d,e,g (5-10-51)
108a* and 118a* are from the same patient, isolated 1 day apart.
113a and 127a " " " " " " 4 days apart, also
from this patient are 110 and 132.
121e and 143a* are from the same patient, isolated 21 days apart.
157a is from same same patient as #160.

Numbers marked with * are serological types O55:B5 and are listed by Kauffmann ("Enterobacteriaceae", 1951, published by Ejnar Munksgaard, Copenhagen) as being delayed positive (3-9 days) for maltose. This strain, as well as the other infant diarrhea serotype O111:B4, are listed as producing slow or delayed reactions in a number of fermentable substrates. Since these are tested in broths, we can draw our own inferences as to what population changes may be involved!

We can send you strains started from other colony isolations of the same specimen on 119, 129, and 170 as well as many other numbers. We also have a few new isolations.

Sincerely yours, W. Catlin